

CLAIMS

What is claimed is:

- 5 1. A content distribution system, comprising:
- a domain name service server which is configured to provide domain
name service responses in response to domain name service requests; and
- a data communications device which is capable of interconnecting
between a client and the domain name service server, wherein the data
10 communications device includes:
- an interface which is capable of communicating with the
client, and
- a controller coupled to the interface, wherein the controller
is configured to:
- 15 intercept a first domain name service request
from the client,
- provide a second domain name service
request to the domain name service server through
the interface in response to interception of the first
20 domain name service request, the second domain
name service request selectively (i) including a
client identifier which identifies the client, and (ii)
not including the client identifier which identifies
the client, based on a selection decision, and
- 25 convey a domain name service response
from the domain name service server to the client
through the interface, the domain name service

response including a content server identifier which identifies a content server.

2. The content distribution system of claim 1 wherein the second domain name
5 service request includes a domain name field, and wherein the controller of the
data communications device includes:
processing circuitry that selectively (i) includes the client identifier in the
domain name field of the second domain name service request, and (ii) does not
10 include the client identifier in the domain name field of the second domain name
service request, based on the selection decision, in order to provide the second
domain name service request.

3. A data communications device, comprising:
- an interface which is capable of communicating with a client; and
- a controller coupled to the interface, wherein the controller is configured to:
- 5 intercept a first domain name service request from the client,
- provide a second domain name service request to the domain name service server through the interface in response to interception of the first domain name service request, the second domain name service request selectively (i) including a client identifier which identifies the client, and (ii) not including the client identifier which identifies the client, based on a selection decision, and
- 10 convey a domain name service response from the domain name service server to the client through the interface, the domain name service response including a content server identifier which identifies a content server.
4. The data communications device of claim 3 wherein the second domain name service request includes a domain name field, and wherein the controller includes:
- 20 processing circuitry that selectively (i) includes the client identifier in the domain name field of the second domain name service request, and (ii) does not include the client identifier in the domain name field of the second domain name service request, based on the selection decision, in order to provide the second domain name service request.
- 25

5. The data communications device of claim 4 wherein the processing circuitry is further configured to:
- 5 include a flag in the domain name field of the second domain name service request when the client identifier is included in the domain name field of the second domain name service request, and not include the flag in the domain name field of the second domain name service request when the client identifier is not included in the domain name field of the second domain name service request.
6. The data communications device of claim 3 wherein the first domain name service request includes a domain name field which contains a domain name, and wherein the controller includes:
- 10 processing circuitry which is configured to generate, as the selection decision, a result having a first value when the domain name belongs to a predetermined group of domain names and a second value when the domain name does not belong to the predetermined group of domain names.
- 15 7. The data communications device of claim 6 wherein the controller further includes:
- 20 memory coupled to the processing circuitry, wherein the memory stores a list of domain names, and wherein the processing circuitry is further configured to access the list of domain names stored in the memory to determine whether the list of domain names includes an entry having the domain name, the domain name belonging to the predetermined group of domain names when the list of domain names includes an entry having the domain name, and the domain name not
- 25 belonging to the predetermined group of domain names when the list of domain name does not include an entry having the domain name.

8. A data communications device, comprising:

an interface which is capable of communicating with a client; and
a controller coupled to the interface, wherein the controller includes:

means for intercepting a first domain name service request
from the client;

means for providing a second domain name service request
to the domain name service server through the interface in response
to interception of the first domain name service request, the second
domain name service request selectively (i) including a client
identifier which identifies the client, and (ii) not including the
client identifier which identifies the client, based on a selection
decision; and

means for conveying a domain name service response from
the domain name service server to the client through the interface,
the domain name service response including a content server
identifier which identifies a content server.

9. A method for obtaining a domain name service on behalf of a client, the method comprising the steps of:
- intercepting a first domain name service request from the client;
 - in response to interception of the first domain name service request,
 - 5 providing a second domain name service request to the domain name service server which, based on a selection decision, selectively (i) includes a client identifier which identifies the client, and (ii) does not include the client identifier which identifies the client; and
 - 10 conveying a domain name service response from the domain name service server to the client, the domain name service response including a content server identifier which identifies a content server.
10. The method of claim 9 wherein the second domain name service request includes a domain name field, and wherein the step of providing the second domain name
- 15 service request includes the step of:
- based on the selection decision, selectively (i) including the client identifier in the domain name field of the second domain name service request ,
 - and (ii) not including the client identifier in the domain name field of the second domain name service request.
- 20

11. The method of claim 10 wherein the step of providing the second domain name service request further includes the step of:

including a flag in the domain name field of the second domain name service request when the client identifier is included in the domain name field of the second domain name service request, and not including the flag in the domain name field of the second domain name service request when the client identifier is not included in the domain name field of the second domain name service request.

12. The method of claim 9 wherein the first domain name service request includes a domain name field which contains a domain name, and wherein the method further comprises the step of:

generating, as the selection decision, a result having a first value when the domain name belongs to a predetermined group of domain names and a second value when the domain name does not belong to the predetermined group of domain names.

13. The method of claim 12 wherein a memory stores a list of domain names, and wherein the step of generating the result includes the step of:

accessing the list of domain names stored in the memory to determine whether the list of domain names includes an entry having the domain name, the domain name belonging to the predetermined group of domain names when the list of domain names includes an entry having the domain name, and the domain name not belonging to the predetermined group of domain names when the list of domain names does not include an entry having the domain name.

14. A computer program product that includes a computer readable medium having instructions stored thereon for obtaining a domain name service on behalf of a client, such that the instructions, when carried out by a computer, cause the computer to perform the steps of:
- 5 intercepting a first domain name service request from the client;
 in response to interception of the first domain name service request,
 providing a second domain name service request to the domain name service
 server which, based on a selection decision, selectively (i) includes a client
 identifier which identifies the client, and (ii) does not include the client identifier
10 which identifies the client; and
 conveying a domain name service response from the domain name service
 server to the client, the domain name service response including a content server
 identifier which identifies a content server.

2025-04-20 10:44:43

15. A domain name service server, comprising:

an interface which is capable of communicating with a data communications device; and

a controller coupled to the interface, wherein the controller is configured

to:

receive a domain name service request from the data communications device through the interface, the domain name service request including a data communications device identifier which identifies the data communications device,

select a content server identifier from a predetermined group of content server identifiers based on (i) a client identifier which identifies a client when the domain name service request further includes the client identifier, and (ii) the data communications identifier when the domain name service request does not include the client identifier, and

provide a domain name service response to the data communications device through the interface, the domain name service response having the selected content server identifier which identifies a content server.

16. The domain name service server of claim 15 wherein the domain name service request includes a domain name field, and wherein the controller includes:

processing circuitry which is configured to determine whether the domain name field of the domain name service request includes a flag indicating that the domain name field includes the client identifier such that (i) selection of the content server identifier is based on the client identifier when the domain name field of the domain name service request includes the flag, and (ii) selection of the content server identifier is based on the data communications identifier when the domain name field of the domain name service request does not include the flag.

5

10

20074446-02400

17. A domain name service server, comprising:

an interface which is capable of communicating with a data communications device; and

a controller coupled to the interface, wherein the controller includes:

5 means for receiving a domain name service request from the data communications device through the interface, the domain name service request including a data communications device identifier which identifies the data communications device,

10 means for selecting a content server identifier from a predetermined group of content server identifiers based on (i) a client identifier which identifies a client when the domain name service request further includes the client identifier, and (ii) the data communications identifier when the domain name service request does not include the client identifier, and

15 means for providing a domain name service response to the data communications device through the interface, the domain name service response having the selected content server identifier which identifies a content server.

20

18. A method for providing a domain name service, the method comprising the steps of:

receiving a domain name service request which includes a data communications device identifier identifying a data communications device;

- 5 selecting a content server identifier from a predetermined group of content server identifiers based on (i) a client identifier which identifies a client when the domain name service request further includes the client identifier, and (ii) the data communications identifier when the domain name service request does not include the client identifier; and

- 10 providing a domain name service response having the selected content server identifier which identifies a content server.

19. The method of claim 18 wherein the domain name service request includes a domain name field, and wherein the step of selecting the content server identifier includes the step of:

- 15 determining whether the domain name field of the domain name service request includes a flag indicating that the domain name field includes the client identifier such that (i) selection of the content server identifier is based on the client identifier when the domain name field of the domain name service request includes the flag, and (ii) selection of the content server identifier is based on the data communications identifier when the domain name field of the domain name service request does not include the flag.
- 20

20. A computer program product that includes a computer readable medium having instructions stored thereon for providing a domain name service, such that the instructions, when carried out by a computer, cause the computer to perform the steps of:
- 5 receiving a domain name service request which includes a data communications device identifier identifying a data communications device;
- selecting a content server identifier from a predetermined group of content server identifiers based on (i) a client identifier which identifies a client when the domain name service request further includes the client identifier, and (ii) the data
- 10 communications identifier when the domain name service request does not include the client identifier; and
- providing a domain name service response having the selected content server identifier which identifies a content server.

2025-04-20 10:44:00